#### Message

From: Cope, Ben [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=497EFADD936E4D378225116B8F50FD3F-COPE, BEN]

**Sent**: 2/1/2019 5:28:02 PM

To: Palmer, John [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=3a702305929342cf90b255c49dbacf4a-Palmer, John]

Subject: RE: Hells Canyon 401 Cert meeting

JP, thanks for the big email and this note, and thanks for continuing to bird dog the fog machine. Looks like some notable inching forward...we're certainly a long way from IPC's FERC app #1!

Unfortunately I've got Dan Turner coming in Tuesday for RBM10 orientation, so will miss the call.

If there's anything you need from me, drop me a line. Cheers. -BC

Ben Cope, Environmental Engineer Office of Environmental Review and Assessment EPA Region 10 206-553-1442

From: Palmer, John

Sent: Friday, February 01, 2019 9:05 AM
To: Cope, Ben <Cope.Ben@epa.gov>
Subject: Fw: Hells Canyon 401 Cert meeting

Hi Ben,

In reading the new draft Certs. and updated IPC application, we can take heart in that they did make some changes in response to our comment letter. Of course, not completely, but some.

Notably, adding the upstream sediment/nutrient reduction program via efficient irrigation as a requirement under required DO load reduction and expanded the season and amount of DO load reduction. For temp, having the Plan B trigger if 3 consecutive years exceed 16.5C is a decent safeguard to address future warming from climate change. As always, IPC inches forward. I've talked to Ritchie he is concerned with the Brownlee drawdown tradeoff as well, however.

john

From: Palmer, John

Sent: Friday, February 1, 2019 8:41 AM

To: Cope, Ben; Byrne, Jennifer; Soscia, Mary Lou; Mann, Laurie

Subject: Fw: Hells Canyon 401 Cert meeting

Hi Ben, Jennifer, ML, and Laurie,

Ecology requested a mtg to discuss the Hells Canyon 401 draft certs because comments are due Feb 12th. I'm not sure if EPA is going to provide a comment letter. Lindsay set up the below meeting at Chad's request - see my summary of the issue and latest review of the draft certs.

Of note is the Brownlee drawdown proposal, which would be trigger in years with projected warm Oct temps (>16.5C in late Oct). However, there is a trade off summarized below. That is, increased Snake River flow in Sept, which will reduce the cooling effect of the Salmon River and the Clearwater, which has the effect of warming the Snake River - potentially up to 1C below Lower Granite Dam in Sept.

Thoughts? And would you like to attend the call?

John

From: Palmer, John

Sent: Thursday, January 31, 2019 1:14 PM

To: Guzzo, Lindsay; Labiosa, Rochelle; Shaw, Hanh; Chung, Angela; chbr461@ecy.wa.gov; mgil461@ECY.WA.GOV;

Bryson Finch

Subject: RE: Hells Canyon 401 Cert meeting

Hi All,

We have meeting next week to discuss the Idaho/Oregon draft CWA 401 Certs. for the Hells Canyon FERC license. Below you will find a brief summary of the decade + sage associated with this project that you may find helpful. The summary also includes a preliminary assessment of the draft Certs. Look forward to our discussion next week.

John

# Background

The Hells Canyon Complex (HCC - Brownlee, Oxbow, Hells Canyon Dams on the Snake River) FERC license expired in 2003. The Idaho Power Company (IPC), which owns the HCC, has been working on getting a new FERC license for the HCC over the last 15 years and has been operating with annual FERC licenses since 2004. As part of receiving a new FERC license, which will likely be for a 40-50 year term, an EIS was issued

for the proposed action in 2007 and IPC has been working over the last decade to obtain CWA 401 certifications from the States of Idaho and Oregon for the proposed action. After the CWA 401 certs are finalized, the proposed action, including any CWA 401 cert. requirements, must undergo ESA consultation with NOAA and FWS prior FERC issuing the final FERC license.

### **EPA Involvement**

EPA initially became involved via its duties to review and comment on the draft EIS. EPA issued an "Environmental Objections - Insufficient Information" comment letter in 2006 raising concerns that the proposed action did not include measures to meet the 13C Fall Chinook spawning criteria and that a temperature control structure could be built to release cold water to attain the criteria and provide cooler fall water temperatures in the Snake River downstream of the HCC. In 2007, Ecology requested that EPA be involved in the Idaho and Oregon CWA 401 certification process because the proposed action/401 cert. requirements could affect downstream water quality in the State of Washington. In 2012, Idaho submitted to EPA for approval a revision to its water quality standards to change the 13C spawning criteria to 14.5C for the first two weeks of the spawning period. EPA is currently reviewing and will be taking action on Idaho's submittal.

# ID/OR 401 Certifications

Since 2007, IPC has submitted multiple applications to Idaho and Oregon for CWA 401 certification. All of the applications (approximately 5) prior to 2016 were withdrawn because they did not include adequate measures to meet the 13C spawning criteria and more specifically meet IPC's load allocation to attain the 13C criteria associated with the Hells Canyon Temperature TMDL. In 2012, a federal agency workgroup (NOAA, FWS, BIA, and EPA) was formed to assist IPC in developing a proposal that would address both the CWA and ESA. An outcome of that effort was IPC's Snake River Stewardship Program (SRSP). The SRSP includes: 1) instream habitat restoration of the Snake River mainstem upstream of Brownlee Reservoir in the Marsing reach, which formally supported significant Fall Chinook spawning; 2) riparian revegetation in approximately 10 tributaries to the Snake River above Brownlee Reservoir; and 3) an IPC program to fund farmers to convert their fields to efficient irrigation just upstream of the Marsing reach to reduce sediment and nutrient loadings. In 2016, Idaho and Oregon issued draft CWA 401 Certs, that included the first two elements of the SRSP as measures to meet IPC's temperature load allocation associated with the 13C criteria. The 2016 draft certs. established quantitative thermal reduction targets (1,211 bkcal in 30 years) for project implementation as a method to meet IPC's temperature load allocation associated with the 13C criteria. In addition, the 2016 draft certs. included a Plan B (Brownlee Dam temperature control structure) that could be triggered if the thermal targets are not met and a set of measures to address other water quality parameters, including DO, TDG, methyl mercury, and toxic algae.

#### EPA Comment Letter on 2016 Draft 401 Certifications

EPA issued a comment letter on the draft certs. in February, 2017 indicating general support with some specific suggestions for improvements. Suggestions for improvement included:

- Add a trigger for Plan B (temp control structure) if poor Fall Chinook returns.
- Include the IPC's SRSP sediment/nutrient reduction program as a cert. requirement, not a voluntary program.
- Better verification of DO measures (e.g. Riverside project) and added DO targets (e.g. more phos reduction upstream and meeting 6.5 mg/l DO below Hells Canyon Dam).
- More specific schedule and requirements for methyl mercury plan.

# Ecology Comment Letter on 2016 Draft 401 Certifications

Ecology issued a comment letter on the draft certs. in February, 2017 recognizing the benefits of the upstream restoration program but raised concerns about whether the measures would ultimately reduce temperatures and meet standards downstream of the HCC. Ecology's letter:

- Supported EPA comments, particularly triggers for Plan B
- Recommended re-opener if measures fail to reduce downstream temperatures and meet standards
- Concerns about trading, and that the trading scheme applied here is unique and not transferable

# Oregon's 2016 Draft 401 Certification Requirements for Fish Passage

The 2016 Oregon and Idaho draft 401 certs. were identical except for Oregon's requirement for fish passage. As a result of this difference and disagreement between the states, the certs. were not finalized. In 2018, this issue was resolved with a settlement agreement.

# 2018 OR/ID Draft 401 Certs.

With the fish passage issue resolved the states re-issued the draft 401 certs. in December, 2018. The re-issued draft certs. are very similar to the 2016 draft certs., with some important additions:

- Based on temperature recordings in 2014 and 2015 that exceeded 17C during the first week of Fall
  Chinook spawning, IPC added an additional temperature measure to address years that are predicted
  to exceed 16.5C during the first week of Fall Chinook spawning. The measure calls for drawing down
  Brownlee Reservoir starting Sept 1st to release higher flows in Sept-Oct that would have the effect of
  reducing temperatures exiting Hells Canyon Dam in October by approximately 1C. And if 16.5C is not
  attained over three consecutive years, it would trigger Plan B/alternative measures.
- The IPC SRSP sediment/nutrient reduction program was added as a requirement to address DO.
- The DO load reduction requirement upstream of Brownlee Reservoir increased from 9,343 kg (May-Sept) to 15,000 kg (mid-April-mid-Oct).
- Minor improvements to DO monitoring requirements
- More descriptive methyl mercury requirements for predictive model, management scenarios, and management plan.

#### Remaining Concerns

On balance, IPC's applications and the latest draft 401 certs. are much improved to address water quality. There are, however, several remaining concerns:

- 1. The Brownlee draw down measure has the potential to modestly reduce temperature below the HCC in October, but there is a trade-off with slightly higher river temperatures in September in the Snake River below the Salmon River confluence (approximately 0.3C) and below the Clearwater River confluence (up to a 1C). There is minimal analysis of this trade-off in the application/draft certs. NOAA has expressed concerns with this trade-off as well. This concern is most significant when Snake River temperatures are above 20C. IPC's analysis below Lower Granite Dam indicates that river temperatures are below 20C during past years that would have triggered the draw down. 20C below Lower Granite Dam is a target for the Army Corp. to manage delivery of cold water from Dworshak Dam. It's possible that a warmer Snake River in early September due to a Brownlee draw down could lead to the need for more cold water released from Dworshak Dam in order to attain 20C below Lower Granite Dam.
- 2. Our reading of the draft certs. is that the only way to revise the thermal reduction requirements for the upstream SRSP (1,191 bkcal) is through a 401 cert. modification, including public comment. Therefore,

if both Idaho and Oregon have EPA approved 14.5C spawning criteria for the first two weeks of the spawning period and if IPC desires to reduce the thermal reduction requirements based on the new criteria, the states must issue a modification to the 401 certs. In the event that this were to occur, EPA believes it would also be appropriate to re-examine the basis for the method to calculate the heat reduction credits for the projects. In particular, the current method to sum heat reduction (kcal) from a project for each day from July through October and to have that value fully apply to the kcal reduction needed to attain the criteria during the October spawning period is both novel and highly uncertain. Under re-examination it may be appropriate to discount the sum of daily kcal reduction for the July-October period, which may result in the same amount of required projects even if the criteria is changed from 13C to 14.5C.

- 3. The 401 certs. have a Plan B (temperature control structure) trigger if downstream temperatures exceed 16.5C for three consecutive years or if the 15 year and 30 year thermal reduction targets are not going to be met. However, there is no Plan B trigger if the thermal reduction targets are met but temperatures downstream of the HCC continue to exceed the spawning criteria.
- 4. The mercury modeling and plan requirements still do not explicitly call for assessing the impacts associated with Plan B (temp control structure).

----Original Appointment-----

From: Guzzo, Lindsay

Sent: Wednesday, December 19, 2018 11:22 AM

To: Guzzo, Lindsay; Palmer, John; Labiosa, Rochelle; Shaw, Hanh; Chung, Angela; <a href="mailto:chbr461@ecy.wa.gov">chbr461@ecy.wa.gov</a>;

mgil461@ECY.WA.GOV; Bryson Finch **Subject:** Hells Canyon 401 Cert meeting

When: Tuesday, February 5, 2019 10:30 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where:

